D 100 Wash

GSB Chemical Co.

Chemwatch: **24-0250** Version No: **3.1.1.1**

Safety Data Sheet according to WHS and ADG requirements

Chemwatch Hazard Alert Code: 4

Issue Date: 04/06/2014 Print Date: 30/10/2015 Initial Date: Not Available S.GHS.AUS.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

| Product name | D 100 Wash | |
|-------------------------------|--|--|
| Synonyms | Blanket Wash | |
| Proper shipping name | MABLE LIQUID, N.O.S. (contains naphtha petroleum, isoparaffin, hydrotreated) | |
| Other means of identification | Not Available | |

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses

Use according to manufacturer's directions.

The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.

Blanket and Press wash. Swabbed on.

Details of the supplier of the safety data sheet

| Registered company name | GSB Chemical Co. | | |
|-------------------------|--|--|--|
| Address | 84 Camp Road Broadmeadows 3047 VIC Australia | | |
| Telephone | +61 3 9457 1125 (8am-5pm, Monday - Friday) | | |
| Fax | +61 3 9459 7978 | | |
| Website | Not Available | | |
| Email | info@gsbchem.com.au | | |

Emergency telephone number

| Association / Organisation | ot Available | |
|-----------------------------------|--|--|
| Emergency telephone numbers | +61 3 9457 1125 (8am-5pm, Monday - Friday) | |
| Other emergency telephone numbers | 13 11 26 (After hours) | |

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the Model WHS Regulations and the ADG Code.

| Poisons Schedule | S5 | | |
|------------------------|---|--|--|
| GHS Classification [1] | Flammable Liquid Category 1, STOT - SE (Narcosis) Category 3, Aspiration Hazard Category 1 | | |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI | | |

Label elements

GHS label elements







SIGNAL WORD DANGER

Hazard statement(s)

| H224 | dremely flammable liquid and vapour | |
|--------|---|--|
| H336 | May cause drowsiness or dizziness | |
| H304 | ay be fatal if swallowed and enters airways | |
| AUH066 | Repeated exposure may cause skin dryness and cracking | |

Precautionary statement(s) Prevention

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

e 2 of 10

Issue Date: 04/06/2014

Print Date: 30/10/2015

| P271 | Use only outdoors or in a well-ventilated area. |
|------|--|
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting//equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |

Precautionary statement(s) Response

| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. | | |
|----------------|---|--|--|
| P331 | OT induce vomiting. | | |
| P370+P378 | In case of fire: Use alcohol resistant foam or normal protein foam for extinction. | | |
| P312 | all a POISON CENTER or doctor/physician if you feel unwell. | | |
| P303+P361+P353 | F ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. | | |
| P304+P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. | | |

Precautionary statement(s) Storage

| P403+P235 | Store in a well-ventilated place. Keep cool. | |
|-----------|--|--|
| P405 | ore locked up. | |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. | |

Precautionary statement(s) Disposal

P501 Dispose of contents/container in accordance with local regulations.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|---------------|-----------|--|
| 64742-48-9. | >80 | naphtha petroleum, isoparaffin, hydrotreated |
| Not Available | <5 | terpene alcohols |
| Not Available | <5 | nonionic surfactants & perfume |

SECTION 4 FIRST AID MEASURES

Description of first aid measures

| Eye Contact | If this product comes in contact with the eyes: • Wash out immediately with fresh running water. • Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper an • Seek medical attention without delay; if pain persists or recurs seek medical attention. • Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. | | | |
|--------------|---|--|--|--|
| Skin Contact | If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation. | | | |
| Inhalation | If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPF necessary. Transport to hospital, or doctor. | | | |
| Ingestion | If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Seek medical advice. A void giving milk or oils. Avoid giving alcohol. | | | |

Indication of any immediate medical attention and special treatment needed

Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

For acute or short term repeated exposures to petroleum distillates or related hydrocarbons:

- ▶ Primary threat to life, from pure petroleum distillate ingestion and/or inhalation, is respiratory failure.
- Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or

Issue Date: 04/06/2014 Print Date: 30/10/2015

- poor arterial blood gases (pO2 50 mm Hg) should be intubated.
- rhythmias complicate some hydrocarbon ingestion and/or inhalation and electrocardiographic evidence of myocardial injury has been reported; intravenous lines and cardiac monitors should be established in obviously symptomatic patients. The lungs excrete inhaled solvents, so that hyperventilation improves clearance.
- A chest x-ray should be taken immediately after stabilisation of breathing and circulation to document aspiration and detect the presence of pneumothorax.
- Figure phrine (adrenalin) is not recommended for treatment of bronchospasm because of potential myocardial sensitisation to catecholamines. Inhaled cardioselective bronchodilators (e.g. Alupent, Salbutamol) are the preferred agents, with aminophylline a second choice.
- Lavage is indicated in patients who require decontamination; ensure use of cuffed endotracheal tube in adult patients. [Ellenhorn and Barceloux: Medical Toxicology]

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- Water spray or fog.
- ▶ Alcohol stable foam.
- Dry chemical powder.
- Carbon dioxide.

Do not use a water jet to fight fire.

Special hazards arising from the substrate or mixture

Fire Incompatibility

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

- ▶ Alert Fire Brigade and tell them location and nature of hazard.
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves in the event of a fire.
- Prevent, by any means available, spillage from entering drains or water course.

 - Consider evacuation (or protect in place).
- Fire Fighting
- Fight fire from a safe distance, with adequate cover.
- If safe, switch off electrical equipment until vapour fire hazard removed.
- Use water delivered as a fine spray to control the fire and cool adjacent area.
- ▶ Avoid spraying water onto liquid pools.
- ► Do not approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- ▶ If safe to do so, remove containers from path of fire

Fire/Explosion Hazard

- ▶ Liquid and vapour are highly flammable.
- Severe fire hazard when exposed to heat, flame and/or oxidisers. Vapour may travel a considerable distance to source of ignition.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- ▶ On combustion, may emit toxic fumes of carbon monoxide (CO).

Combustion products include; carbon dioxide (CO2) other pyrolysis products typical of burning organic material Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Minor Spills

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact with the substance, by using protective equipment.
- Contain and absorb small quantities with vermiculite or other absorbent material.
- Wipe up
- ▶ Collect residues in a flammable waste container

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard
- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- Consider evacuation (or protect in place).
- No smoking, naked lights or ignition sources. ► Increase ventilation.
- **Major Spills**
- Stop leak if safe to do so.
- Water spray or fog may be used to disperse /absorb vapour.
- Contain spill with sand, earth or vermiculite.
- Use only spark-free shovels and explosion proof equipment.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- ▶ If contamination of drains or waterways occurs, advise emergency services.

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling

- Containers, even those that have been emptied, may contain explosive vapours
- Do NOT cut, drill, grind, weld or perform similar operations on or near containers.

Contains low boiling substance:

Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.

▶ Check for bulging containers.

Page 4 of 10 D 100 Wash Issue Date: 04/06/2014 Print Date: 30/10/2015

- ▶ Vent periodically
- Always release caps or seals slowly to ensure slow dissipation of vapours
- DO NOT allow clothing wet with material to stay in contact with skir
- Electrostatic discharge may be generated during pumping this may result in fire.
- Ensure electrical continuity by bonding and grounding (earthing) all equipment.
- Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec).
- Avoid splash filling.
- Do NOT use compressed air for filling discharging or handling operations.
- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- Avoid smoking, naked lights, heat or ignition sources.
- When handling, DO NOT eat, drink or smoke
- Vapour may ignite on pumping or pouring due to static electricity.
- DO NOT use plastic buckets
- Earth and secure metal containers when dispensing or pouring product.
- Use spark-free tools when handling Avoid contact with incompatible materials.
- Keep containers securely sealed.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storage and handling recommendations contained within this SDS.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

Other information

- Store in original containers in approved flame-proof area.
- No smoking, naked lights, heat or ignition sources.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.

- Keep containers securely sealed.
- Store away from incompatible materials in a cool, dry well ventilated area. Protect containers against physical damage and check regularly for leaks
- Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

- ▶ Packing as supplied by manufacturer.
- Plastic containers may only be used if approved for flammable liquid.
- Check that containers are clearly labelled and free from leaks.
- For low viscosity materials (i): Drums and jerry cans must be of the non-removable head type. (ii): Where a can is to be used as an inner package, the can must have a screwed enclosure.
- For materials with a viscosity of at least 2680 cSt. (23 deg. C) Suitable container
 - For manufactured product having a viscosity of at least 250 cSt. (23 deg. C)
 - Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C): (i) Removable head packaging; (ii) Cans with friction closures and (iii) low pressure tubes and cartridges may be used.
 - Where combination packages are used, and the inner packages are of glass, there must be sufficient inert cushioning material in contact with inner and outer packages
 - In addition, where inner packagings are glass and contain liquids of packing group I there must be sufficient inert absorbent to absorb any spillage, unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic.

Storage incompatibility

Avoid reaction with oxidising agents

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Not Available

EMERGENCY LIMITS

| Ingredient | Material name | | TEEL-1 | TEEL-2 | TEEL-3 |
|--|---|---------------|----------|---------|---------|
| naphtha petroleum, isoparaffin, hydrotreated | Naphtha, hydrotreated heavy; (Isopar L-rev 2) | | 171 ppm | 171 ppm | 570 ppm |
| | | | | | |
| Ingredient | Original IDLH Revise | | sed IDLH | | |
| naphtha petroleum, isoparaffin, hydrotreated | Not Available | Not Available | | | |
| terpene alcohols | Not Available | Not Available | | | |
| nonionic surfactants & perfume | Not Available | Not Available | | | |

Exposure controls

Appropriate engineering controls

CARE: Use of a quantity of this material in confined space or poorly ventilated area, where rapid build up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear

Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.

The basic types of engineering controls are:

Process controls which involve changing the way a job activity or process is done to reduce the risk.

Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.

Print Date: 30/10/2015

Issue Date: 04/06/2014

D 100 Wash

Employers may need to use multiple types of controls to prevent employee overexposure

For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant.

Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

| Type of Contaminant: | Air Speed: |
|---|----------------------------------|
| solvent, vapours, degreasing etc., evaporating from tank (in still air). | |
| aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation) | 0.5-1 m/s (100-200 f/min.) |
| direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion) | 1-2.5 m/s (200-500 f/min.) |

Within each range the appropriate value depends on:

| Lower end of the range | Upper end of the range |
|--|----------------------------------|
| 1: Room air currents minimal or favourable to capture | 1: Disturbing room air currents |
| 2: Contaminants of low toxicity or of nuisance value only. | 2: Contaminants of high toxicity |
| 3: Intermittent, low production. | 3: High production, heavy use |
| 4: Large hood or large air mass in motion | 4: Small hood-local control only |

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

Personal protection









Eye and face protection

Safety glasses with side shields.Chemical goggles.

Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59], [AS/NZS 1336 or national equivalent]

Skin protection

See Hand protection below

- ► Wear chemical protective gloves, e.g. PVC.
- Wear safety footwear or safety gumboots, e.g. Rubber

NOTE:

- ► The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.
- Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.

The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application

The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include:

Hands/feet protection

- frequency and duration of contact,
- chemical resistance of glove material,
- ▶ glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739, AS/NZS 2161.1 or national equivalent).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- ▶ When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374, AS/NZS 2161.10.1 or national equivalent) is recommended.
- ▶ Some glove polymer types are less affected by movement and this should be taken into account when considering gloves for long-term use.
- Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

▶ Neoprene rubber gloves

Body protection

Other protection

See Other protection below

▶ Overalls.

- ► PVC Apron.
- PVC Apron.
 PVC protective suit may be required if exposure severe.

Eyewash unit.

▶ Ensure there is ready access to a safety shower.

Some plastic personal protective equipment (PPE) (e.g. gloves, aprons, overshoes) are not recommended as they may produce static electricity.

For large scale or continuous use wear tight-weave non-static clothing (no metallic fasteners, cuffs or pockets).

Non sparking safety or conductive footwear should be considered. Conductive footwear describes a boot or shoe with a sole made from a conductive compound chemically bound to the bottom components, for permanent control to electrically ground the foot an shall dissipate static electricity from the body to reduce the

D 100 Wash

Issue Date: 04/06/2014 Print Date: 30/10/2015

Thermal hazards

possibility of ignition of volatile compounds. Electrical resistance must range between 0 to 500,000 ohms. Conductive shoes should be stored in lockers close to the room in which they are worn. Personnel who have been issued conductive footwear should not wear them from their place of work to their homes and return.

Not Available

Respiratory protection

Not Available

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Appearance | Clear flammable liquid with an orange odour; partially miscible with water | | |
|--|--|---|----------------|
| Physical state | #00Liquid | Relative density (Water = 1) | 0.8 |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available |
| pH (as supplied) | Not Available | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | 35-174 | Molecular weight (g/mol) | Not Applicable |
| Flash point (°C) | <0 (ASTM D-93) | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | HIGHLY FLAMMABLE. | Oxidising properties | Not Available |
| Upper Explosive Limit (%) | 7.0 | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | 0.8 | Volatile Component (%vol) | 98 |
| Vapour pressure (kPa) | 1.9 | Gas group | Not Available |
| Solubility in water (g/L) | Partly Miscible | pH as a solution (1%) | Not Available |
| Vapour density (Air = 1) | >1 | VOC g/L | Not Available |

SECTION 10 STABILITY AND REACTIVITY

| Reactivity | See section 7 |
|------------------------------------|--|
| Chemical stability | Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur. |
| Possibility of hazardous reactions | See section 7 |
| Conditions to avoid | See section 7 |
| Incompatible materials | See section 7 |
| Hazardous decomposition products | See section 5 |

SECTION 11 TOXICOLOGICAL INFORMATION

Inhaled

Ingestion

Information on toxicological effects

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.

There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage

Inhalation hazard is increased at higher temperatures.

Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and lightheadedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowsiness, tremors and stupor.

Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.

Inhalation of aerosols (mists, furnes), generated by the material during the course of normal handling, may be damaging to the health of the individual. The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.

Accidental ingestion of the material may be damaging to the health of the individual.

Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and ulcers of the mucous. Symptoms include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions.

Not a likely route of entry into the body in commercial or industrial environments. The liquid may produce considerable gastrointestinal discomfort and be harmful or toxic if swallowed

Continued...

Issue Date: 04/06/2014 Print Date: 30/10/2015

| Skin Contact | Repeated exposure may cause skin cracking, flaking or drying following normal handlir Open cuts, abraded or irritated skin should not be exposed to this material The material may accentuate any pre-existing dermatitis condition | g and use | |
|---|--|---------------------|--|
| Еуе | There is some evidence to suggest that this material can cause eye irritation and damage in some persons. Direct eye contact with petroleum hydrocarbons can be painful, and the corneal epithelium may be temporarily damaged. Aromatic species can cause irritation and excessive tear secretion. | | |
| Chronic | Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. There is limited evidence that, skin contact with this product is more likely to cause a sensitisation reaction in some persons compared to the general population. Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin. Repeated application of mildly hydrotreated oils (principally paraffinic), to mouse skin, induced skin tumours; no tumours were induced with severely hydrotreated oils. | | |
| | TOXICITY | TATION | |
| D 100 Wash | Not Available Not A | vailable | |
| naphtha petroleum, isoparaffin, hydrotreated | F41 | TATION available | |
| terpene alcohols | | TATION available | |
| nonionic surfactants & perfume | | TATION vailable | |
| Legend: | Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value extracted from RTECS - Register of Toxic Effect of chemical Substances | obtained i | from manufacturer's SDS. Unless otherwise specified data |
| Acute Toxicity | ○ Carcino | genicity | 0 |
| Skin Irritation/Corrosion | | uctivity | 0 |
| Serious Eye Damage/Irritation | STOT - Single Ex | posure | ✓ |
| Respiratory or Skin sensitisation | STOT - Repeated Ex | posure | 0 |
| Mutagenicity | Aspiration Hazard | | |

Data required to make classification available

Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

| Ingredient | Endpoint | Test Duration | Species | Value | Source |
|--|----------|---------------|-------------------------------|---------|--------|
| naphtha petroleum, isoparaffin, hydrotreated | EC50 | 96 | Algae or other aquatic plants | 640mg/L | 2 |

For Hydrocarbons: log Kow 1, BCF~10.

For Aromatics: log Kow 2-3.

BCF 20-200. For C5 and greater alkanes: log Kow 3-4.5. BCF 100-1,500.

For Alkanes, Benzene, Toluene, Ethylbenzene, Xylene (BTEX):

Environmental Fate: Microbes found in many natural settings (e.g., soils, groundwater, ponds) have been shown to be capable of degrading organic compounds. Some hydrocarbons will become associated with marine sediments likely to be spread over a fairly wide area of sea floor. Under aerobic conditions, hydrocarbons degrade to water and carbon dioxide, while under anaerobic processes, they produce water, methane and carbon dioxide. Anaerobic degradation is slower than aerobic. Biodegradation can eliminate the contaminants without dispersing them throughout the environment. The rate of hydrocarbon degradation depends on the chemical composition of the product released to the environment as well as site-specific environmental factors. Hydrocarbons with condensed ring structures, such as PAHs (polycyclic aromatic hydrocarbons) with four or more rings, have been shown to be relatively resistant to biodegradation. PAHs with only 2 or 3 rings (e.g., naphthalene, anthracene) are more easily biodegraded. In almost all cases, the presence of oxygen is essential for effective biodegradation. Straight chain hydrocarbons and aromatics degrade more readily than highly branched aliphatic compounds. The n-alkanes, n-alkyl aromatics, and the aromatics in the C10-C22 range are the most readily biodegradable; n-alkanes, n-alkyl aromatics, and aromatics in the C5-C9 range are biodegradable at low concentrations by some microorganisms, but are generally preferentially removed by volatilization and thus are unavailable in most environments; n-alkanes in the C1-C4 ranges are biodegradable only by a narrow range of specialized hydrocarbon degraders; n-alkanes, n-alkyl aromatics, and aromatics above C22 are generally not available to degrading microorganisms. The ideal pH range to promote biodegradation is close to neutral (6-8). For most species, the optimal pH is slightly alkaline, that is, greater than 7. Generally, as the temperature increases, biological activity tends to increase up to a temperature where enzyme denaturation occurs,

Atmospheric Fate: Alkanes, isoalkanes, and cycloalkanes have half-lives on the order of 1-10 days, whereas alkenes, cycloalkenes, and substituted benzenes have half-lives of 1 day or less. Photochemical oxidation products include aldehydes, hydroxy compounds, nitro compounds, and peroxyacyl nitrates. Alkenes, certain substituted aromatics, and naphthalene are potentially susceptible to direct photolysis

Aquatic Fate: Volatilization half-life predicted as 7 days (ponds), 1.5 days (rivers), 6 days (lakes). Volatilization rate of naphthalene and its substituted derivatives estimated to be slower. The lower molecular weight hydrocarbons are expected to form a "slick" on the surface of waters after release in calm seas which is expected to evaporate and enter the atmosphere where it will be degraded through reaction with hydroxy radicals. Ecotoxicity: Effects on freshwater/saltwater organisms: Hydrocarbons are hydrophobic. Such substances produce toxicity in aquatic organisms by a mechanism referred to as "non-polar narcosis" or "baseline" toxicity. Toxic effects are often observed in species such as blue mussel, water fleas, freshwater green algae, marine copepods and amphipods

Drinking Water Standards: hydrocarbon total: 10 ug/l (UK max.).

DO NOT discharge into sewer or waterways.

Page **8** of **10**

D 100 Wash

Issue Date: **04/06/2014**Print Date: **30/10/2015**

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|------------|---------------------------------------|---------------------------------------|
| | No Data available for all ingredients | No Data available for all ingredients |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|------------|---------------------------------------|
| | No Data available for all ingredients |

Mobility in soil

| Ingredient | Mobility |
|------------|---------------------------------------|
| | No Data available for all ingredients |

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- ▶ Reuse
- ▶ Recycling
- ► Disposal (if all else fails)

possible to reclaim the product by filtration, distillation or some other means. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

Product / Packaging disposal

- ▶ DO NOT allow wash water from cleaning or process equipment to enter drains.
- ▶ It may be necessary to collect all wash water for treatment before disposal.
- ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- $\,\blacktriangleright\,$ Where in doubt contact the responsible authority.
- ► Recycle wherever possible.
- ► Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.
- ► Dispose of by: burial in a land-fill specifically licenced to accept chemical and / or pharmaceutical wastes or Incineration in a licenced apparatus (after admixture with suitable combustible material).
- ▶ Decontaminate empty containers. Observe all label safeguards until containers are cleaned and destroyed.

SECTION 14 TRANSPORT INFORMATION

Labels Required



| Marine Pollutant | NO |
|------------------|------|
| HAZCHEM | •3YE |

Land transport (ADG)

| Land transport (ADG) | |
|------------------------------|--|
| UN number | 1993 |
| Packing group | |
| UN proper shipping name | FLAMMABLE LIQUID, N.O.S. (contains naphtha petroleum, isoparaffin, hydrotreated) |
| Environmental hazard | No relevant data |
| Transport hazard class(es) | Class 3 Subrisk Not Applicable |
| Special precautions for user | Special provisions 274 Limited quantity 1 L |

Air transport (ICAO-IATA / DGR)

| UN number | 1993 |
|----------------------------|--|
| Packing group | |
| UN proper shipping name | Flammable liquid, n.o.s. * (contains naphtha petroleum, isoparaffin, hydrotreated) |
| Environmental hazard | No relevant data |
| Transport hazard class(es) | ICAO/IATA Class 3 ICAO / IATA Subrisk Not Applicable ERG Code 3H |

Issue Date: 04/06/2014 Print Date: 30/10/2015

| Special precautions for user | Special provisions | A3 |
|------------------------------|---|----------|
| | Cargo Only Packing Instructions | 364 |
| | Cargo Only Maximum Qty / Pack | 60 L |
| | Passenger and Cargo Packing Instructions | 353 |
| | Passenger and Cargo Maximum Qty / Pack | 5 L |
| | Passenger and Cargo Limited Quantity Packing Instructions | Y341 |
| | Passenger and Cargo Limited Maximum Qty / Pack | 1 L |

Sea transport (IMDG-Code / GGVSee)

| UN number | 1993 |
|------------------------------|--|
| Packing group | II . |
| UN proper shipping name | FLAMMABLE LIQUID, N.O.S. (contains naphtha petroleum, isoparaffin, hydrotreated) |
| Environmental hazard | Not Applicable |
| Transport hazard class(es) | IMDG Class 3 IMDG Subrisk Not Applicable |
| Special precautions for user | EMS Number F-E , S-E Special provisions 274 Limited Quantities 1 L |

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

NAPHTHA PETROLEUM, ISOPARAFFIN, HYDROTREATED(64742-48-9.) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists Australia Inventory of Chemical Substances (AICS)

- Not Applicable
- Not Applicable

| National Inventory | Status |
|----------------------------------|---|
| Australia - AICS | Y |
| Canada - DSL | Y |
| Canada - NDSL | N (naphtha petroleum, isoparaffin, hydrotreated) |
| China - IECSC | Y |
| Europe - EINEC / ELINCS / NLP | Y |
| Japan - ENCS | N (naphtha petroleum, isoparaffin, hydrotreated) |
| Korea - KECI | Y |
| New Zealand - NZIoC | Y |
| Philippines - PICCS | Y |
| USA - TSCA | Y |
| Legend: | Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) |

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

| Name | CAS No |
|--|---------------------------|
| naphtha petroleum, isoparaffin, hydrotreated | 101795-02-2., 64742-48-9. |

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Definitions and abbreviations

PC-TWA: Permissible Concentration-Time Weighted Average

PC-STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit。

Chemwatch: 24-0250 Version No: 3.1.1.1

Page **10** of **10** Issue Date: 04/06/2014 Print Date: 30/10/2015 D 100 Wash

IDLH: Immediately Dangerous to Life or Health Concentrations OSF: Odour Safety Factor NOAEL: No Observed Adverse Effect Level LOAEL: Lowest Observed Adverse Effect Level TLV: Threshold Limit Value LOD: Limit Of Detection

OTV: Odour Threshold Value BCF: BioConcentration Factors BEI: Biological Exposure Index